METHOD AND APPARATUS FOR A REMOTE TIRE PRESSURE MONITORING SYSTEM

RELATED APPLICATIONS

[0001] The present application is a continuation of application serial no. 09/245,938, filed February 5, 1999. pending, which is hereby incorporated herein in its entirety by this reference.

BACKGROUND

[0002] The present invention is generally related to a method and apparatus for monitoring characteristics of a tire in a vehicle.

[0003] Systems have been developed to monitor a characteristic such as tire pressure of a vehicle and to report the characteristic to a receiver at a central monitoring station using radio transmissions. A monitor is located at each tire and periodically takes a measurement of the tire characteristic. The monitor then transmits the results of the measurement in a radio frequency transmission to the central monitoring station which produces an alarm or a display in response to the measurement.

[0004] One problem with such systems has been the need to program the location of the transmitters at the central station. To be fully useful, the tire characteristic data is preferably associated with the tire which originated the measurement when presenting a display or alarm. Each monitor includes identification information which can be transmitted with the measurement. The tire monitor is preferably activated to produce this information and the information is then conveyed to the central station and associated with the position of the tire.

[0005] In one technique, the tire monitors each include a reed switch or other magnetic device. A magnet is passed near the reed switch, causing the monitor to transmit a radio frequency transmission that includes identification data. A service technician repeats this process at each wheel and then loads the identification and position information into the central monitoring station. Another method provides a printed bar code on each

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